FY16 ANNUAL REPORT

SOUTHERN AFRICA REGIONAL ENVIRONMENTAL PROGRAM

OCTOBER 2015 TO SEPTEMBER 2016



October 2016

This publication was produced for review by the United States Agency for International Development. It was prepared by Chemonics International Inc.

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ACRONYMS AND ABBREVIATIONS

CA Conservation Agriculture

CBNRM Community-Based Natural Resource Management

CLTS Community Led Total Sanitation

COP Chief of Party – SAREP

CORB Cubango-Okavango River Basin DCOP Deputy Chief of Party – SAREP

DSS Decision Support System

DWA Department of Water Affairs – Namibia

DWNP Department of Wildlife and National Parks – Botswana
DWSSC Directorate of Water Supply and Sanitation Coordination

FHI 360 Family Health International 360
GEF Global Environment Facility
IEE Initial Environmental Examination

IRBM Okavango Integrated River Basin Management Project

IWQM Integrated Water Quality Management LUCIS Land Use Conflict Information System

MAWF Ministry of Agriculture, Water and Forestry – Namibia MINUA Ministry of Urban Planning and Environment – Angola

MOMS Management Orientated Monitoring Systems

NAP National Action Plan

NGO Nongovernmental Organization
NRM Natural Resource Management
OBSC Okavango Basin Steering Committee
OkBMC Okavango Basin Management Committee

OKACOM Permanent Okavango River Basin Water Commission PACSE Participation for Communities in Sanitation Education

PES Payments for Ecosystem Services

PILUMP Participatory, Integrated Land-use Management Plans

PSI Population Services International OASP Quality Assurance Surveillance Plan

REDD Reducing Emissions from Deforestation and Forest Degradation

SADC Southern Africa Development Community

SAREP Southern Africa Regional Environmental Program

SEA Strategic Environmental Assessment
TAC Technical Advisory Committee
TDA Trans-boundary Diagnostic Analysis

USAID United States Agency for International Development

USFS United States Forest Service WSS Water Supply and Sanitation

INTRODUCTION

The Southern Africa Regional Environmental Program (SAREP) was originally a five-year project to support the initiatives of the Southern Africa Development Community (SADC) to address threats to ecosystem services and biodiversity within priority, shared river basins. The program was awarded an extension from the October 1, 2015 to December 17, 2016. The project works in collaboration with the Permanent Okavango River Basin Water Commission (OKACOM) to implement strategies and activities centered on conserving biodiversity, improving water supply and sanitation services, and strengthening regional capacity to respond to the effects of climate change.

This report presents SAREP's progress relative to the revised expected results and outcomes set for the extension period.

I. FY16 ANNUAL REPORT

A. Highlights

One of the greatest highlights of the extension period has been the collaboration shown between SAREP and its sister program in the region, the Resilience in the Limpopo River Basin Program (RESILIM) in a number of activities that have strengthened key bodies and organizations in the subcontinent across a wide platform. Based upon the commonalities in both programs' activities and objectives, it was seen fit to work together to strengthen the membership base of IUCN as the major conservation body in Southern Africa that has a broad membership base and that has historically been a force for regional integration and cohesion. Linked to this historical 'glue' factor was the associated focus on sustainable use in the landscape that fostered a sense of stewardship within communities towards their natural resources and especially wildlife – using the flow of benefits to them from activities such as sport hunting and resource harvesting.

As a strategic approach to work towards reestablishing previous levels of cohesiveness among involved organizations – many of whom were members of IUCN Southern Africa – SAREP and RESILIM decided to convene a new body of scholar-practitioners who are 'thought-leaders' in the region to form the *Southern African Resilience Alliance* (SARA) relating to the concepts of resilience and sustainable use as a core to build around. A number of well-respected professionals were invited to form the group which met on nearly a monthly basis during the year – providing guidance on the perspectives that the region needed to put forward at the IUCN Global 'World Conservation Congress' (WCC) in Hawaii at the beginning of September 2016 and at the CITES meeting that was to be held in early October 2016, in Johannesburg, South Africa. Linked to this the group collaborated with SAREP-RESILIM and IUCN Southern Africa to hold a workshop designed to create greater cohesiveness among IUCN's local members and develop a more united perspective at the WCC and CITES events. This event was extremely successful in bringing the various organizations closer and played a significant role in making sure that the region's voice on matters of sustainable use and resilience were heard at the WCC and CITES.

SARA also played a significant role in critiquing the background research papers that SAREP and RESILIM commissioned to inform the High Level Dialogue (HLD) Retreat that brought together key senior level decision makers from the basin state countries to discuss issues relating to the looming crisis facing the food-energy-water nexus in Southern Africa. The Retreat was seen to be a critical and logical conclusion to the various research that was undertaken by the two programs over the past five years, concerning impacts of climate change across the sub-continent with these being compounded by the predicted doubling of the human population by the year 2050. The research commissioned highlighted the possibility of intersecting shortages of water causing a reduction in hydro-power, economic declines, food shortages, migration of communities, and increased competition for scarce resources that could fuel tensions and lead to conflicts. All of the government participants committed themselves to create greater awareness about this major challenge in their respective government planning processes.

B. Annual Summary by Program Element

Based upon progress against stated indicators of the base five year program and the levels of achievement against targets agreed upon, USAID Southern Africa awarded the program a costed extension through September 30, 2016 and subsequently, a no-cost extension to December 17, 2016, to fully complete its range of activities and to ensure that other key areas of focus had a critical mass of experience gained and interest developed within communities and organizations to ensure

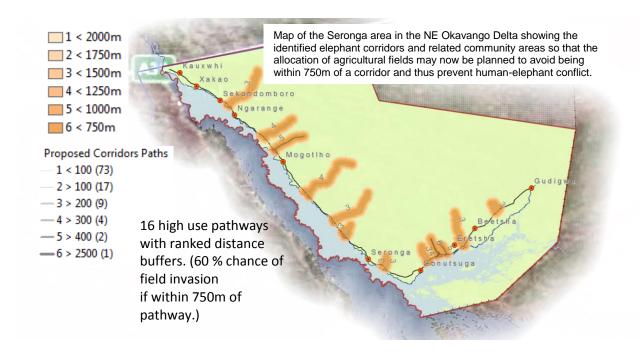
sustainability and widespread adoption. The intention of this annual summary is to show SAREP's progress in assisting OKACOM to protect the Cubango-Okavango River Basin (CORB).

Biodiversity Program Element

During the past year the following key results have been achieved in the activities relating to biodiversity management:

As one of the priority areas of the extension, SAREP continued to work closely with the Department of Environment (MINAMB) in Angola to initiate the development of protected area management plans for the Mavinga and Luiana-Luengue National Parks which jointly cover an area of approximately 68,600 square kilometers. Consultants were contracted with the approval of MINAMB in Angola to initiate the planning process and develop the required framework plans that would guide initial processes to develop infrastructure in appropriate places across the landscape to meet immediate short-term protection requirements and to work towards longer term provision of infrastructure such as roads, water supplies, buildings, and telecommunications. The plans were developed through a process of consultation with a broad range of stakeholders in Angola at the national, provincial, and community levels. The plans were approved in a workshop with MINAMB in Luanda and eventually launched at a ceremony held in the provincial capital, Menongue, in September 2016. The number of people permanently living within the park boundaries was much larger than was initially expected, with an estimate of 12,083 people living within just the main five settlements. This number is derived from the estimated number of households provided by the District authorities to ACADIR within these five settlements (Mucusso, Licua, Jamba, Bairro-Nova, and Bairro 11) and the application of the average number of households derived from the Community Led Total Sanitation (CLTS) monitoring survey in Mucusso of 5.6 people per household. To ensure that the rapid rural appraisal covered an appropriate proportion of the population, ACADIR surveyed 30% of all households, speaking with one representative of that household. In total they surveyed 556 people, asking them about their knowledge of the status of the park, their primary livelihood activity, exposure to human-wildlife conflict, as well as their hopes and aspirations now that the land has been declared a National Park. The results were presented within the draft management plans. Consultant, John Mendelsohn developed baseline maps for the National Parks, defining habitat types and mapping the layout and extent of infrastructural development. John also undertook an aerial survey of the parks to help with the mapping and assessment of land use types.

Building off the earlier work with the Tawana Land Board in the Ngamiland District of northern Botswana, during 2014 and early 2015, where the Land Use Conflict Identification System (LUCIS) of GIS-based planning methodology was chosen as the over-arching tool in land use planning and land allocation, SAREP supported the Tawana Land Board to roll out the system to the other three Sub-land Boards in the District – with the entire district now using this more efficient and effective form of land planning allocation, covering the Okavango Delta and protecting biodiversity in the process. The Seronga Land Sub-land Board was the role model in allocating land in a responsible and systematic way using the system – especially in ensuring that agricultural land was not allocated to people in elephant movement corridors, thus reducing levels of human-elephant conflict in the area.



A major initiative that was spearheaded by a collaborative effort between SAREP and its sister USAID RBO support program in the region, RESILIM was the formation of SARA, a group of conservation and development 'thought leaders' from the Southern Africa region. This group was formed in response to demands from conservation and development stakeholders in the region who felt the need to have a more cohesive and consolidated standpoint on issues affecting the region. SARA is a sustainable development and resilience network in the region that will promote both the sustainable use of natural resources and enhancing resilience in the context of transformative development. The power of its potential impact and outreach is founded on the expertise, knowledge, and respectability of its members, all of whom have extensive contacts and personal leverage with policy makers in the region. The group convened on nearly a monthly basis in the last year with its first action being the provision of input into SAREP and RESILIM's participation in both the WCC, held in Hawaii in early September 2016 and the CITES meeting held in Johannesburg in early October 2016. A key outcome of this involvement was the identification of key issues to be addressed by the region's stakeholders at the two events and developing a plan of action to support regional participants at the events in terms of refining and researching issues to be addressed as a region. A major issue identified was the lack of regional cohesion among the key members of IUCN across the region in terms of a common conservation and development vision for southern Africa especially in terms of stances on sustainable use of natural resources and the involvement of communities as de facto custodians on the ground.

At the WCC, the SAREP-RESILIM team facilitated two events—the first being a two hour workshop comparing the management of four transboundary protected area models (the Kavango Zambezi Transfrontier Conservation Area (KAZA TFCA) process around the Zambezi Region of northeast Namibia; the Greater Limpopo TFCA around the Kruger National Park in northeast South Africa; an area of southeast Russia and northwest China; and the North American Inter-Governmental Committee on Cooperation for Wilderness and Protected Areas Conservation (NAWPA Committee) which includes the United States, Canada, and Mexico. The event highlighted a great number of commonalities in approach centered on the political will to collaborate in the management of transboundary ecosystems. The second event successfully outlined the mechanisms

followed to promote the strengthening of resilience across borders in the six countries involved in the joint SAREP-RESILIM geographical footprint.

The joint programs also organized a 'Southern African' exhibition stand that was used as the base and rallying point for all participants from the region—effectively creating a sense of commonality and solidarity. This same sense of identity served to have one of the SARA members, Jennifer Mahomad-Katerere elected to be one of IUCN's Commissioners for Africa, while the Chairperson of the IUCN South Africa Members Committee was also elected as the Chairperson of IUCN's larger Eastern-Southern African Regional Committee.

SARA also played a pivotal role in the review of background research that was commissioned in the run-up to the HLD that was held in the Pilanesberg National Park in August 2016, reviewing and critiquing the papers to be presented to the participants at the HLD. The RESILIM plans on continuing to seek opportunities to support the functioning of SARA over the next six months, during which it will develop a strategy for sustainability.

Over the course of implementation of both the SAREP and RESILIM programs, research has highlighted that the region is potentially facing critical crises over the next 35 years as the impacts of climate change in the western sectors of the subcontinent become drier – resulting in reduced flows in a number of key river systems such as the Okavango, Kwando, and Zambezi rivers – all of which will result in reduced potential to generate hydro-power. Juxta posed to this is the predicted doubling of the human population in the region by the year 2050 – also leading to crippling demands for potable water, agricultural water, and industrial water. Food and energy security will be compromised alongside consequential degradation of the natural environment as people are forced



Participating senior level government officials from the key basin state governments of the Okavango River Basin and the Limpopo River Basin Commissions who participated in the High Level Retreat held in the Pilanesberg National Park in August 2016.

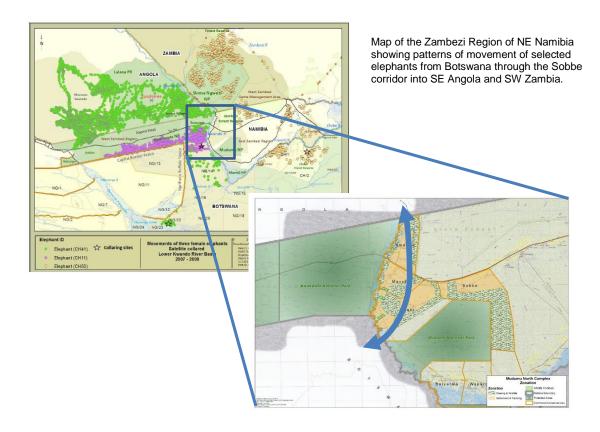
deeper into poverty. Understanding this, the two programs hosted the HLD for key decision makers of the basin state governments. A key outcome of the HLD was the acknowledgement of all the participating senior government officials that the looming challenges were indeed severe and that there was a need for greater levels of regional and integrated planning. The officials committed themselves to return to their respective governments and make the challenges known to their fellow senior officials in other ministries.

During 2015 and 2016, SAREP collaborated with the International Conservation Caucus Foundation (ICCF) Group to establish the Botswana Parliamentary Conservation Caucus (BOPACOC), a multiparty coalition of Members of the Botswana Parliament with a commitment to elevating the role that stewardship of natural resources plays in Botswana's domestic policymaking and Southern Africa's regional development strategy. BOPACOC will work with conservation and development stakeholders to engage on initiatives to strengthen Botswana's policy and legislative frameworks for natural resource management, drive implementation of on-the-ground programs, and enhance regional collaboration.

In the past year SAREP continued to work with the GoB to develop a GIS and internet-based Wildlife Monitoring Protocol for the Department of Wildlife and National Parks to collect data on wildlife sightings which will be entered into a data-capturing website designed to carry out basic levels of instant analysis. The data will be collected by game rangers in the more than 57 luxury tourism camps in the delta. During the year extensive testing was carried out on the system to ensure accuracy and functionality to prevent mistakes and malfunctioning of the calculations. The website has become functional from a testing perspective and will facilitate the analysis of the data collected and contribute to a greater understanding of wildlife management and population trends on an ongoing basis. Guides in the camps were instructed on how to collect and record data for all of the 14 prescribed monitoring activities, ranging from observing the occurrence of rare and endangered species, alien and invasive species, predator sightings and their kills, as well as how to undertake transects to record species population dynamics. The system was launched in July 2016 in Maun with relevant public and private sector participants in attendance.

SAREP continued to collaborate with the GoB and the US Embassy in Botswana, in taking forward the WENSA mechanism to combat illicit trade in wildlife products initiated in a workshop held in Gaborone in 2013, by attending a number of meetings with DWNP officials and communicating with the main consultant who is integrating the process into related SADC security structures and processes. The GoB negotiated with the European Commission to provide a specialist advisor to oversee the final integration of the process into SADC processes.

The Sobbe Wildlife Migration corridor through the Kwando River floodplains, saw SAREP partners IRDNC and WWF in Namibia work with the KAZA TFCA to strengthen governance structures in the region so that participating communities could move out of critical wetland corridor areas to higher ground and allow elephant, buffalo, zebra, and wildebeest herds to move freely between Zimbabwe-Botswana and southeast Angola and southwest Zambia. The DCOP attended meetings with the involved groups to ensure that movements of animal groups were incorporated into various ongoing research programs in the area and ensure that these transboundary projects were collaborating and working towards a common goal held by the five countries. SAREP also worked with UKAID's CRIDF program to leverage funding to assist in drilling boreholes on higher ground areas so that communities who migrated there could continue their agricultural activities.



During the year SAREP continued discussions with the GEF-funded BioChobe program, based in Kasane, Botswana, to finalize the support that the Advanced Fire Information System (AFIS) decision support tool for northern Botswana. Vast tracts of rangeland are destroyed annually through uncontrolled wildfires which are a major concern to the Ministry of Wildlife, Environment and Tourism in Botswana. In addition, SAREP finalized its related collaboration with the United States Forest Service (USFS) in Botswana in improving the management and suppression of fires in Ngamiland through better risk assessment and protection. Rick O'Connell from the USFS travelled to Botswana in late February and early March 2016 to work with the Department of Forestry and Range Resources (DFRR) staff members in Ngamiland. He travelled with them and representatives of the UNDP-GEF-funded Sustainable Land Management (SLM) program to the Tsodilo Hills World Heritage Site. The site is very exposed and vulnerable to the risks of bush fires, which threaten to destroy the ancient bushman art and cave paintings. Mr. O'Connell reviewed and provided technical input to the Tsodilo Hills Bush Fire Management Plan, which was well received by both the SLM and DFRR. The Tsodilo Hills fire management plan is to be implemented jointly by SLM and DFRR, and SAREP will continue to provide support to them during this process. Further to these activities, Mr. O'Connell developed a simple fire prevention plan for the safari lodges within the Delta based on the lessons learned from his time spent at Tsodilo Hills.

Water Supply and Sanitation Program Element

SAREP has adopted a multi-faceted approach to water and sanitation management that integrates community education, water infrastructure development, and planning at the local, national, and trans-boundary levels as a means of providing safe drinking water to rural populations, while also protecting water quality and quantity to support vulnerable ecosystems alongside improving sanitation. Below, SAREP's achievements in WSS are disaggregated by specific accomplishments in Angola, Botswana, and Namibia.

Sanitation

During the extension phase, SAREP was able to facilitate 14,689 people to gain access to improved sanitation services against a target of 4,207 people through its CLTS program, much of this now being as a result of peer-pressure driven processes encouraging its spread across the basin. In January

2016, SAREP undertook a CLTS monitoring survey of the four clusters in Angola: Calai, Cuangar, Savate, and Mucusso. It was found that during the period from August through December 2015 alone, the communities had developed 133 latrines, constructed primarily of locally available materials and natural products. Household surveys confirmed that 2,220 people now had improved access to sanitation services. Through a strong network of active CLTS volunteers in Calai and Savate, which each have 15 trained volunteers, and the support of community structures and traditional leadership, the communities organized



Children from the Calai District in SE Angola standing outside of their pit-latrine that was constructed from natural materials.

themselves to sustainably implement the CLTS program, even with SAREP being relatively less active in the field. Through their efforts the implementation of open defecation free (ODF) action plans are now underway, with the village of Kuito (in Calai) now ODF with 100 percent latrine coverage.

In Botswana, CLTS mobilization activities occurred with approximately 180 people in the Habu community, where action plans were developed for latrine construction and improving personal sanitation behavior. In Gumare and Sepopa, further CLTS triggering activities were carried out in two junior secondary schools, involving a total of 56 environmental education club students and three teachers. During the past year SAREP worked with six junior secondary schools (JSS) located within Maun (Moeti JSS with 938 students, Sedie JSS with 1,150 students, Tshwaragano JSS with 1152 students, and Tsodilo with 1380 students), Sehitwa (Ngami JSS with 619 students), and Tsau (Sekgoma JSS with 402 students). A workshop was initially held at the SAREP offices in Maun on January 6, 2016, to promote the CLTS methodologies to the representatives from the Ministry of Education Regional office and the school heads of the six schools that are being targeted in the SAREP CLTS in schools activity. In March, an intensive training workshop was held with 21 people trained to be CLTS volunteers and to lead the CLTS roll-out and triggering at each school. The 14 students and seven teachers were also trained in how to use the CLTS M&E toolkit.





Pupils participating in a training exercise to learn how to construct a 'tippy-tap' so that they may be able to wash their hands outside the pit-latrines they help construct at their schools.

In Namibia during the year CLTS was used as the primary mechanism by DWSSC in their mobilization and roll-out program to install 791 latrines in the Kavango Region, providing improved sanitation to 8,701 people. In addition, 1,800 people have received improved sanitation services through the implementation of the CLTS process by the local NGO Komeho and the development of 100 more latrines in the village of Kaisosi.

WASH Specialist, Robyn Tompkins from SAREP Subcontractor JG-Afrika continued supporting projects initiated in the initial five year period, including the successful WASH education program at schools within Botswana's Ngamiland District, teaching the students better hygiene and sanitation behavior. She also continued to promote the expansion of the program with other Ministries to promote the integration of the National CLTS Strategy, which SAREP developed with the Ministry of Health and the Ministry of Local Government, into the processes of other Ministries in Botswana in order to elevate CLTS to a national level. She also continued to support the government of Namibia with its national roll-out program of CLTS by DWSSC in all regions of the country.

Water Supply

SAREP has been working with NamWater since 2012 to develop large-scale water supply schemes in the Kavango Region of Namibia. SAREP was originally introduced to the Karutci Community by DWSSC in 2011. At the time, the community had 67 households and a population of 925 people. The community's water committee had raised funds for a pipeline to connect with the NamWater Borehole, but did not have enough funding to cover the distance required. In 2012, the SAREP worked with NamWater and the Karutci Community to purchase the necessary materials and training the community construction team to install and backfill the pipeline, as well as assist with the installation of 11 metered standpipe taps spread throughout the community. Since the scheme was established, it has grown considerably, with many of the registered users connecting directly into the line in order to have taps at their own houses, with 99 direct individual connections to households and 85 registered households using the 11 standpipe taps. The scheme now supplies 2,024 people and has grown to provide an additional 1,099 people with access to water since the scheme was developed with SAREP's support in 2012. The Karutci Community Water Supply

scheme is an example of a truly collaborative effort between the SAREP program, the Namibia Government, parastatal organization (NamWater), and the community.

In southeast Angola, protracted negotiations relating to the MOU between DFID-funded CRIDF and the government of Angola that would have formed the basis of support to the Calai community of approximately 14,000 people to complete their water supply system resulted in the project extending beyond the life of the SAREP program and was therefore removed from its scope of activities. CRIDF continued to explore options to support the project.

Global Climate Change Program Element

In this area of focus, it was intended that SAREP would work with targeted communities in developing the necessary tools, procedures, and expertise to increase resilience and adaptive capacity, to understand vulnerabilities, and avoid crises such as floods, droughts, and fires.

Many rural communities across the basin use natural resources to supplement their livelihoods and incomes by creating foods and products to sell – such a woven baskets, jewelry, and curios. In Botswana, SAREP worked with the Office of the President, to form a new body called the Botswana Natural Products Association to consolidate the efforts of producer groups as a means of strengthening their capacity and better representing their group efforts at a marketing level. SAREP supported the formation of the new association to consolidate the efforts of producer groups by strengthening their capacity to beneficiate wild plant material and through training, quality control, securing new markets, and managing their enterprises more efficiently. By suggesting a new range of products to be produced and the potential value of sales the Office of the President immediately made available a budget of US\$350,000 to kick-start the formation of the association and the hosting of the first training courses to strengthen the capacity of communities to make world class products that could be sold overseas.

SAREP's introduction of conservation agriculture (CA) across the CORB over the past two years has succeeded to varying degrees, with recent results showing that these new technologies and methodologies continue to assist farmers to increase production in adverse conditions. In Angola, there has been a consistent uptake of CA by the farmers, where more than 349 farmers were engaged in cerealbased CA in the south east of the province. In some cases farmers have also adapted the CA techniques to undertake vegetable gardening and even growing chili peppers to use in preventing elephants raiding their crops.





The effects of the drought in SE Angola: (L) November 2014 and (R) April 2015





In some areas significant harvests were achieved despite the drought.

Although most farmers had reduced yields in the 2015/2016 growing season due to very low rainfall, they have generally harvested more than they would have done had they continued to use traditional farming methods.

Through its collaboration with IRDNC, SAREP has helped to improve the governance and natural resources management of six conservancies within the Zambezi Region, improving the management of 156,600 hectares of biologically important land and improving the economic benefits of 4,086 conservancy members derived from the sustainable management of their natural resources. SAREP supported the revision of two community conservancy constitutions for the 1,062 members of the Balywera Conservancy (22,500 ha) and 3,024 members of the Bamunu Conservancy (55,600 ha). The process of revising the constitutions was participatory, with each village of each of the two conservancies reviewing versions until agreement was reached on the final versions. Through these interventions the governance of the conservancy has been improved, and thereby, the management of the natural resources which occur within the conservancy are better managed. However, the devolution of decision making to community members and the equitable distribution of benefits to them has been a key driver in encouraging members to see themselves as the custodians of their natural resources.

In Angola, the Governor of Kuando Kubango Province has, following discussions with ACADIR and traditional leaders, provided the authority for communities to re-engage with Devil's Claw buyers directly after the market was closed following the impoundment of part of the 2014 harvest as a result of supposed infringements of permitting regulations. The Governor resolved that the communities of Kuando Kubango have the freedom to resume the sustainable harvesting and sale of Devil's Claw as part of a local initiative to help solve problems of rural poverty and hunger. The announcement from the Governor followed initial pressure applied by ACADIR in December 2015 to the provincial authorities and the Governor's office, where ACADIR employee Antonio Chipita met with the Director of Agriculture Directorate and new Director of the Forestry Department of Kuando Kubango to outline the benefits to local communities from the harvest and sale of the Devil's Claw. Following these meetings, the Governor met with traditional leaders, who expressed concern about the involuntary movement of their people from Angola to Namibia to look for work as a result of the drought conditions and lack of food and job opportunities within their own districts. The traditional leaders urged the Governor to reconsider his position with regards the harvest and sales of Devil's Claw, which had previously resulted in significant economic benefits to their community members. Subsequent to this meeting a letter was sent from the Governor to all of the district administrators clearing the way for communities to be allowed to sustainably harvest, store, and sell the products from Devil's Claw, reeds, and thatching grass.

Upon receiving the letter from the Governor the local administrators from Calai, Dirico, and Cuangar reached out to ACADIR for assistance with coordinating the training of community members in sustainable harvest procedures and the sales process. All of the district administrators have requested that the harvest and sales of Devil's Claw should proceed as it was first demonstrated and implemented by SAREP in 2014. The district administrators also facilitated meetings between ACADIR and the customers and inspection police from the Cuangar, Calai, Mucusso, and Mbwambwata border posts with Namibia in mid-January 2016 to ensure there would be no problems with the export of the natural resource products from the harvest. The district administrator from Calai also released 200 bags of confiscated Devil's Claw to the buyer, Ecoso Dynamics, which they had already bought. To support the sustainable harvesting and expansion of the Devil's Claw economy within Kuando Kubango, SAREP procured and distributed 1,500 harvesting kits, which consist of collection bags, a knife, and nets for drying the harvested tuber. The previous harvest

involved 861 active registered harvesters from a total of 1,340 trained harvesters. The new kits were distributed to new harvesters.

B. Additional Progress toward Results and Other Contractual Requirements

Strategic Activities Fund

The Strategic Activities Fund (SAF) continued to form the backbone of SAREP's activities with communities in rural areas during the extension period through grants issued to key NGO partners who had worked with the program during the initial five year element. The support given to these organizations served to help them complete a range of activities in their respective areas that needed to be taken to levels of critical mass to ensure sustainability or to allow for local adoption rates to be such that the momentum of implementation would facilitate continuity into the future.

In the Kavango Region of northeast Namibia, NNF used the support to extend the number of communities participating in Devil's Claw harvesting to a further five communities where the newly trained participants harvested a total of 3,191kg of Devil's Claw, at an average of 45.6 kg per active harvester the active harvesters earned a total of N\$86,157 (approximately US\$6,400) as direct cash benefits from Devil's Claw harvesting during the first buying event this season, at an average of US \$90,00 per harvesting event. This was the first time these harvesters had received a considerable amount from Devil's Claw harvesting and they indicated a great deal of satisfaction with the result and appeared highly motivated to continue harvesting. Further sales during September and October would have brought in significant additional income, however this data was not available from NNF at the time of concluding this report. The data will be included in the SAREP Final Report.

In Angola, ACADIR continued to work with communities on extending skills in conservation agriculture among key communities in the southeast of the country alongside carrying out a survey to verify demographic information among communities of the area. Although ACADIR was well placed to support the re-activation of Devil's Claw harvesting in the province with the permission given to communities to resume harvesting, a later intervention by Angola's Ministry of Environment - MINAMB prevented this from happening by invoking a ban on harvesting until an environmental impact assessment had been carried out to ensure that harvesting was sustainable – despite SAREP's training of communities having followed the very stringent rules, procedures, systems, and processes developed over 20 years in Namibia with their harvesting activities.

Continuing activities with both Pabalelo Trust and Ecoexist in the upper reaches of the Okavango Delta in northern Botswana concerning conservation agriculture showed varying levels of adoption and success with the continuing drought causing some farmers to become despondent and discontinuing the approach. Pabalelo carried out significant research into the conservation agriculture approach, experimenting with a number of techniques and variations that they considered might be more applicable to their particular soil and climate regime. Ecoexist continued to experiment with solar powered electric fencing



Farmer in the Seronga area of northern Okavango Delta ploughing in a field secured by electric fencing to stop elephants raiding his crops.

to deter elephants from raiding crops of millet – thereby reducing human-elephant conflict.

Public-Private Partnerships (PPPs)

The support to diversify and strengthen the livelihoods of communities living in rural areas as a means of adapting to climate change impacts, included training women in improved approaches and designs of basket weaving. In a bid to encourage more women to participate in such activities,

SAREP worked with the local Maun-based NGO *Travel for Impact* to secure international markets for their arts and craft products as well as to improve the standard of their selling outlets in the delta. The private sector and national government all assisted in this effort – with a number of companies contributing financially to have shops in villages refurbished with new marketing display infrastructure being built. The Ministry of Gender Affairs also assisted with donations to rehabilitate components of the Nhabe Museum in Maun as a centralized marketing outlet for communities to be able to display their products for sale.









The new coffee shop and craft center combination opened in the Nhabe Museum in Maun with the support of the SAREP program.

Participation and benefits associated with gender and marginalized populations

During the year SAREP focused particular attention on strengthening the capacity of women and marginalized groups (women, girls, and youth) across the basin by ensuring that women were included in activities and community governance structures while the program paid attention to marginalized groups such as San, Bayei, Hambukushu, Herero, and others through programs specifically aimed at their needs.

CLTS continued to be a major thrust of SARP during the extension in all three countries resulting in more than 20,821 people having improved access to improved sanitation at the end of the original five year phase, while more than 14,689 people gained access to better sanitation during the extension phase, bringing the LOP total to 35,510 people with access to improved sanitation. Poor sanitation is often a major source of disease in rural communities – especially among babies and young girls where water supplies are poor and erratically or badly managed. In Botswana, the CLTS program was extensive and covered 10 communities in the Northwest District, while the WASH

program – though initially focused on two schools – grew to address WASH in eight schools by the end of the program. CLTS baseline surveys were conducted in all 10 sites and baseline survey training for six staff from the Northwest District Council. A CLTS database was completed and is up to date as of July 2016 and a CLTS M&E Toolkit was also developed and tested in both Angola and Botswana. At the completion of WSS activities in July 2016, 3,066 people in the Okavango Delta in Botswana had improved sanitation from 241 latrines built, with a further 40 latrines under construction. SAREP also continued its work with schools in the Ngamiland District of Botswana supporting the rehabilitation of ablution blocks, facilitating the introduction of management systems in the school staff and students, as well as the formation of sanitation maintenance clubs. Over 4,000 pupils were assisted to obtain access to improved sanitation in the last year. Young pupils are often at risk of having to visit bush areas around their schools, leading to truancy and missing valuable time in the classroom. Moreover, going to the bush makes girls particularly vulnerable to rape, and lack of proper ablution facilities at school is a leading cause of girls not attending school during menstruation.

In Namibia, CLTS was used to support the provision of pit-latrines in a campaign in the region through a WASH education strategy that gave more than 10,480 people access to improved sanitation in programs implemented through the DWSSC and its various partners who provided the infrastructure, while SAREP facilitated improved sanitation behavior through its technical support. In Angola, the CLTS program was taken to all of the SAREP clusters in the Cuando-Cubango Province – from Mucusso in the south east corner to Caiundo, south of Menongue. At its start in November 2013, 11 CLTS facilitators were trained from the Calai area, who in turn carried out a six day CLTS training of trainer's workshop for other facilitators in the province to establish a larger group of trained facilitators that had better access to the community clusters located between the border at Savate and Caiundo. SAREP engineers Gomolemo Mokete and Moemedi Kebokilwe conducted latrine construction demonstrations in relevant areas to expose communities to latrines designs that did not require any materials to be bought, but could be built from locally available materials. From this small start, the program has spread to all other clusters in Angola. In addition, the Calai group have attended trainings in Namibia for latrine siting and construction quality, which they have consistently applied to improve the latrines that were built originally back in Angola. During the year more than 2,220 people gained access to improved sanitation.

Addressing marginalized ethnic group's needs, SAREP's conservation agriculture activities were invariably carried out in areas where marginalized groups lived – the San, Bayei, Hambukushu, Herero in the Okavango Delta, while San people were significant participants in the Devil's Claw harvesting and conservation agriculture efforts in southeast Angola and the Kavango and Zambezi Regions of northeast Namibia.

C. Transforming Lives Summary

The two success stories highlighted during this period capture SAREP's efforts to work collaboratively with other USAID program and to influence national and regional policy direction. The stories are summarized below; versions intended for dissemination are included in Annex D.

Transforming Lives Story – High Level Retreat's Regional Dilemmas

As a result of research carried out by both the SAREP and RESILIM programs over their lives of the programs, it was noted that the two compounding influences of climate change and human population growth in the region would cause significant levels of food, energy and water insecurity. To create greater awareness of this challenge a retreat for high level decision makers in governments

of the two river basins was held with the outcome being that the participants committed themselves to create greater awareness in their own national governments.

Transforming Lives Story – SAREP-RESILIM Unify Region's Players

Due to a demand from conservation and development practitioners in the Southern African region the two programs off SAREP and RESILIM worked with local NGOs to create and foster greater cohesion and collaboration in developing a more common vision and strategy across the region. The success of these efforts have been notable.

ANNEX A. BENCHMARKS AND PERFORMANCE MANAGEMENT

The table below shows the SAREP indicators by Key Result Area, with descriptions of the activities leading to the results achieved and notes on the activities captured in the year.

Indicator	١	ears 1-5			Year 6						LOP		
	Total	Target	Y1-5%	Q1	Q2	Q3	Q4	Total	Target	Y 6 %	Total	Target	LOP %
KRA 1: Increased access to safe water supply and sanitation for targeted communities in the CORB													
Number of people in target area with access to improved drinking water (Impact)	20,885	20,000	104%	0	1,099	8,551	0	9,650	4,000	241%	30,535	24,000	127%
Number of people in target area with access to improved sanitation services (Impact)	20,821	25,000	83%	0	12,721	1,090	878	14,689	4,207	349%	35,510	25,000	142%
Number of improved water resource allocation plans (Impact)	51	152	34%	0	0	110	0	110	101	109%	161	152	106%
KRA 2: Decreased threat	ts to biodiv	ersity cons	servatio	n with	in transb	oundar	ry manager	ment areas					
Area (hectares) under improved natural resources management (Impact)	5,919,000	4,000,000	148%	0	141,800	6,760	9,460,995	9,609,555	560,000	1716%	15,528,555	4,560,000	341%
5. Area (hectares) of biologically important area under improved management (Impact)*	5,861,000	5,946,000	99%	0	141,800	5,800	7,167,076	7,314,676	361,640	2023%	13,175,676	6,307,640	209%
KRA 3: Increased adaptive capacity to the effects of climate change for targeted communities													
6. Number of people with increased economic benefits derived from sustainable natural resource management and conservation (Output)	2,690	5,000	46%	0	4,086	0	585	4,671	2,681	174%	7,361	5,000	147%

7. Number of people with increased adaptive capacity to adapt to the impacts of climate change (Impact)	30,871	30,000	103%	0	0	892	4,086	4,978	3,480	143%	35,849	33,480	107%
8. Number of different tools adopted by governmental, non-governmental institutions, or communities to manage climate-caused crises such as floods, droughts, and fires (Output)	5	12	42%	0	2	3	5	10	7	143%	15	12	125%
KRA 4: Increased capaci	ty within ta	argeted nat	ural res	ource	manage	ment aເ	gencies						
9. Number of Institutions with improved capacity to address Climate Change Issues as a result of USG assistance (Impact)				0	2	4	8	14	5	280%	14	5	280%
10. Number of laws, policies, strategies, plans, or regulations addressing climate change mitigation or adaptation and/or biodiversity conservation officially proposed or adopted, as a result of USG assistance (Output)				0	3	7	3	13	7	186%	13	7	186%

ANNEX B. ENVIRONMENTAL COMPLIANCE

Activities during this reporting period primarily included trainings and technical consultation — activities that are categorically excluded from environmental mitigation and monitoring, per Section 2 of SAREP's approved Initial Environmental Examination. However, SAREP grantee Ecoexist piloted a solar-powered electric fence that entailed a negative determination with conditions and thus, required an Environmental Mitigation Plan & Report (EMPR). Per SAREP's grant agreement, Director of Ecoexist Dr. Graham McCulloch, a registered environmental practitioner in Botswana, oversaw the activity and monitoring efforts according to the EMPR.

ANNEX C. DELIVERABLES, REPORTS, AND PUBLICATIONS SUBMITTED

Deliverable	Last Version Prepared/Submitted	Status
USAID Progress and Planning reports	· ·	
Monthly Reports		
October 2015	November 12, 2015	Final
November 2015	December 10, 2015	Final
December 2015	January 8, 2016	Final
January 2016	February 16, 2016	Final
February 2016	March 11, 2016	Final
March 2016	April 11, 2016	Final
April 2016	May 11, 2016	Final
May 2016	June 10, 2016	Final
June 2016	July 7, 2016	Final
July 2016	August 11, 2016	Final
August 2016	September 16, 2016	Final
September 2016	October 12, 2016	Final
October 2016	November 10, 2016	Final
Quarterly Reports		
FY 2016 Q1	January 15, 2016	Final
FY 2016 Q2	April 15, 2016	Final
FY 2016 Q3	July 15, 2016	Final
Revised FY 2016 Q4	November 11, 2016	Draft
Semi-Annual Reports		
FY 2016 October - March	April 15, 2016	Final
Revised FY 2016 Annual Report	November, 11 2016	Draft
Technical Reports and Publications		
Mobile Feasibility Report	Nov-15	Final
2015 Devil's Claw Sales Report	Dec-15	Final
Learning Journey Report and Photos	Dec-15	Final
Mechanized Ripper Furrow Training Report	Dec-15	Final
Completed Service Provider Contract	Jan-16	Final
Detailed Milestone-based Activity Plan	Jan-16	Final
2015 Devil's Claw Post Harvest Report	Feb-16	Final
Field Maintenance Training Report	Feb-16	Final
Kyaramacan Association Report and	Mar-16	Final
Biannual Conservation Planning Meeting Report	Mar-16	Final
Youth Communication Program Report	Mar-16	Final
Conservation Visioning Methodology Report	Mar-16	Final
Conservancy Constitution Booklets (8 Total)	Mar-16 & May-16	Final
Stakeholder Workshop Report	Mar-16	Final
Proceedings from The CBNRM Regional Seminars and National Forum	Mar-16 & Jul-16	Final
Five Minute Arts and Crafts in Botswana Movie and One Minute Trailer	Mar-16	Final

Deliverable	Last Version	Status
	Prepared/Submitted	
Installation Report including GPS Locations, Photographs, and Names of Farmers Who Were	Mar-16	Final
Trained in Installing and Utilizing the System	Wiai-10	Fillal
Integrated Organization Audit Forms and Review		
Posters	Apr-16 & Jun-16	Final
Value Chain Development and Product Expansion		
Report	Apr-16	Final
Community Extension Report	Apr-16	Final
Maun Based Collective Management Training Report	Apr-16	Final
Suitability Maps and Criteria Models for Each Sub-	710	1 IIIai
district	Apr-16	Final
Botswana Parliamentary Conservation Caucus		
Launch Report	Apr-16	Final
Food Security in Southern Africa Discussion Paper	Apr-16	Final
Energy Security in Southern Africa Discussion Paper	Apr-16	Final
Water Use in Southern Africa Discussion Paper	Apr-16	Final
Background Transboundary River Basin Discussion		
Paper	Apr-16	Final
Final Ripper Furrower Report	Apr-16	Final
Map of Allocated Land in Wildlife Corridors of		
Zambezi Region	May-16	Final
Status Report on/Plan for Wildlife Corridors	May-16	Final
Final Engagement With Conservancy Youth Report	May-16	Final
Report on Mashi Conservancy Business and	•	
Investment Plan	May-16	Final
Action Plan for Transboundary Collaborative	15. 16	F: 1
Management of Forestry and Timber Trade	May-16	Final
Report from Second Subsequent Management	M 16	T' 1
Support interventions	May-16	Final
Report from First Collective Product Development	M 16	F' 1
Training	May-16	Final
Lake Ngami Trust Training Reports (2)	May-16 & Sep-16	Final
Policy and Governance Discussion Paper	May-16	Final
LUCIS Scoping Report	May-16	Final
Conservancy Visioning Final Report	Jun-16	Final
Trip Report from Tanzania Field Visit	Jun-16	Final
Reports on Four Trans-frontier Exchanges	Jun-16	Final
Harvest Expansion Report	Jun-16	Final
Triggering/Re-Triggering Progress Report	Jun-16	Final
Conservation Agriculture Rapid Rural Appraisal		
Questionnaire Review	Jun-16	Final
Electronic Versions of Constitutions, Management	Jun 16	Tim -1
Plans, and Presentations	Jun-16	Final
Final Conservation Agriculture Report	Jun-16	Final
Rehabilitation of Water Supply Infrastructure in	Jun 16	Eino!
Three Schools in the Northwest Region of Botswana	Jun-16	Final

Deliverable	Last Version Prepared/Submitted	Status
Bergstan Water Supply & Sanitation Completion Report	Jun-16	Final
Devil's Claw Workshop Report	Jul-16	Final
Final Management Plans	Jul-16	Final
Mechanized Conservation Agricultural Training Report	Jul-16	Final
Final Report on Survey of Active Community-Based Organizations in Botswana	Jul-16	Final
Five Minute Standardized Wildlife Monitoring Protocols for Concessions Movie and One Minute Trailer	Jul-16	Final
Pabalelo Grant Completion Report	Jul-16	Final
WSS Closeout Reports for Angola, Botswana, and Namibia	Aug-16	Final
Ecoexist Grant Completion Report	Sep-16	Final

ANNEX D. TRANSFORMING LIVES STORIES